



Matrix 400™

QUICK REFERENCE GUIDE



Figure A

1 Device Class Label	7 HMI X-PRESS™ Interface
2 Mounting Holes (4)	8 "POWER ON" LED
3 Lens Cover	9 Standard Serial Interface Connector
4 Lens (separate accessory)	10 Ethernet Connector (Ethernet Models Only)
5 Internal Illuminator (separate accessory)	11 Ethernet Connection LED (Ethernet Models Only)
6 Mounting Holes	



NOTE

This manual illustrates a Stand Alone application. For other types of installations, such as Pass-Through, Multiplexer Layout, etc. and for a complete reader configuration using the VisiSet™ configuration program, refer to the Matrix 400™ Reference Manual available on the CD. This manual is also downloadable from the Web at www.automation.datalogic.com/matrix400.

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I

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D

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- **VisiSet™** a utility program, which allows device configuration using a PC. It provides RS232 and Ethernet interface configuration.

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STEP 1 – ASSEMBLE THE READER

The first step to perform is to assemble the accessories that make up the Matrix 400™ reader. The lens and either an internal or an external illuminator must be used. This procedure shows an internal illuminator.



Matrix 400™ must be disconnected from the power supply during this procedure.

CAUTION

1. In a dust-free environment, remove the Matrix 400™ Lens Cover by unscrewing it.



Do not touch the sensor aperture, lens glass or lens cover glass. These areas must be kept clean. Avoid any abrasive substances that might damage these surfaces during cleaning.

CAUTION

2. Remove the rubber sensor protection cap by pulling it out of the base.
3. Mount the lens by screwing it tightly onto the base.
4. If using an internal illuminator:
 - a. Mount the 4 internal illuminator spacers into the holes provided on the base.
 - b. Align and mount the Illuminator board tightly onto the spacers using the 4 screws provided in the illuminator package. The spacers are positioned asymmetrically to avoid incorrect alignment.
5. To keep dust and dirt off of the lens during mounting, temporarily replace the lens cover.

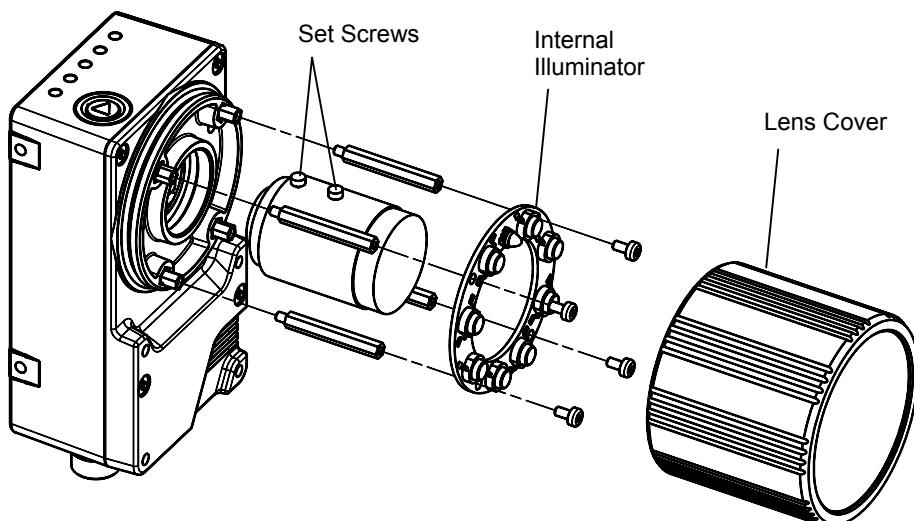


Figure 1 – Assembling Matrix 400™ Accessories

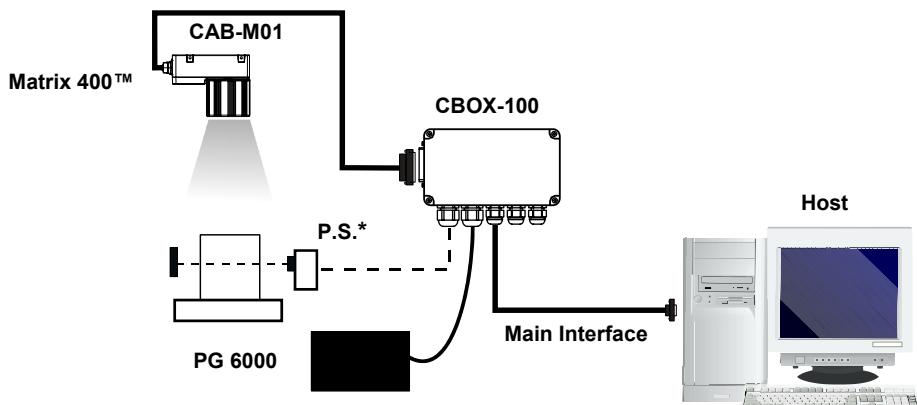
REQUIRED ACCESSORIES

Lenses		Internal Illuminators		
93ACC1793	LNS-1006	6MM C-MOUNT LENS	93A401019	LT-001 INTERNAL LT RED NARROW ANGLE
93ACC1794	LNS-1109	9MM C-MOUNT LENS	93A401020	LT-002 INTERNAL LT RED WIDE ANGLE
93ACC1795	LNS-1112	12.5MM C-MOUNT LENS	93A401021	LT-003 INTERNAL LT WHITE NARROW ANGLE
93ACC1796	LNS-1116	16MM C-MOUNT LENS	93A401022	LT-004 INTERNAL LT WHITE WIDE ANGLE
93ACC1797	LNS-1125	25MM C-MOUNT LENS	93A401024	LT-006 INTERNAL LT RED SUPER NARROW ANGLE
93ACC1798	LNS-1135	35MM C-MOUNT LENS		
93ACC1799	LNS-1150	50MM C-MOUNT LENS		

STEP 2 – CONNECT THE SYSTEM

To connect the system in a Stand Alone configuration, you need the hardware indicated in Figure 2. In this layout the data is transmitted to the Host on the main serial interface. Data can also be transmitted on the RS232 auxiliary interface independently from the main interface selection.

When One Shot or Phase Mode Operating mode is used, the reader is activated by an External Trigger (photoelectric sensor) when the object enters its reading zone.



* External Trigger or Presence Sensor (for On Shot or Phase Mode)

Figure 2 – Matrix 400™ in Stand Alone Layout

C-BOX 100 Pinout for Matrix 400™

The table below gives the pinout of the C-BOX 100 terminal block connectors. Use this pinout when the Matrix 400™ reader is connected by means of the C-BOX 100:

C-BOX 100 Terminal Block Connectors							
Power				Outputs			
1, 3, 5	VS			21	OUT 1+		
2, 4, 6	GND			22	OUT 1-		
7, 8	EARTH GROUND			23	OUT 2+		
20, 40	Reserved			24	OUT 2-		
Inputs				25	NC		
27	EXT TRIG A (polarity insensitive)			26	NC		
28	EXT TRIG B (polarity insensitive)			Auxiliary Interface			
29	IN2 A			35	TX AUX		
30	IN2 B			37	RX AUX		
31, 33	NC						
32, 34	NC			36	Reserved		
39	GND			38	Reserved		
Main Interface							
	RS232	RS485 Full-Duplex	RS485 Half-Duplex	20 mA C.L. (with INT-30 only)			
11, 15	TX 232	TX 485+	RTX 485+	see INT-30 instructions			
12, 16	RTS 232	TX 485-	RTX 485-				
17	RX 232	*RX 485+					
18	CTS 232	*RX 485-					
10, 14, 19	GND	GND	GND				
9, 13		RS485 Cable Shield	RS485 Cable Shield				

* Do not leave floating, see Reference Manual for connection details.

STEP 3 – MOUNT AND POSITION THE READER

1. To mount the Matrix 400™, use the mounting brackets to obtain the most suitable position for the reader. Two of the most common mounting configurations are shown in the figures below. Other mounting solutions are provided in the Matrix 400™ Reference Manual.

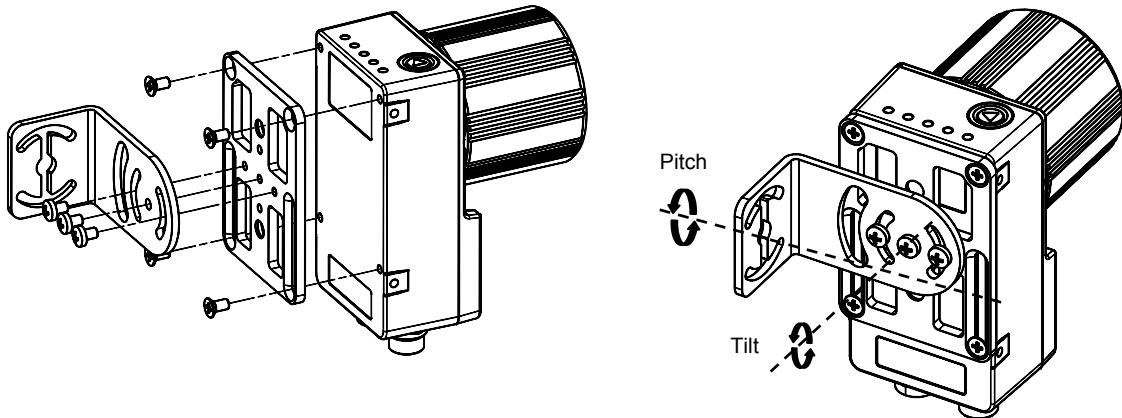


Figure 3 –Positioning with Mounting Bracket (Back)

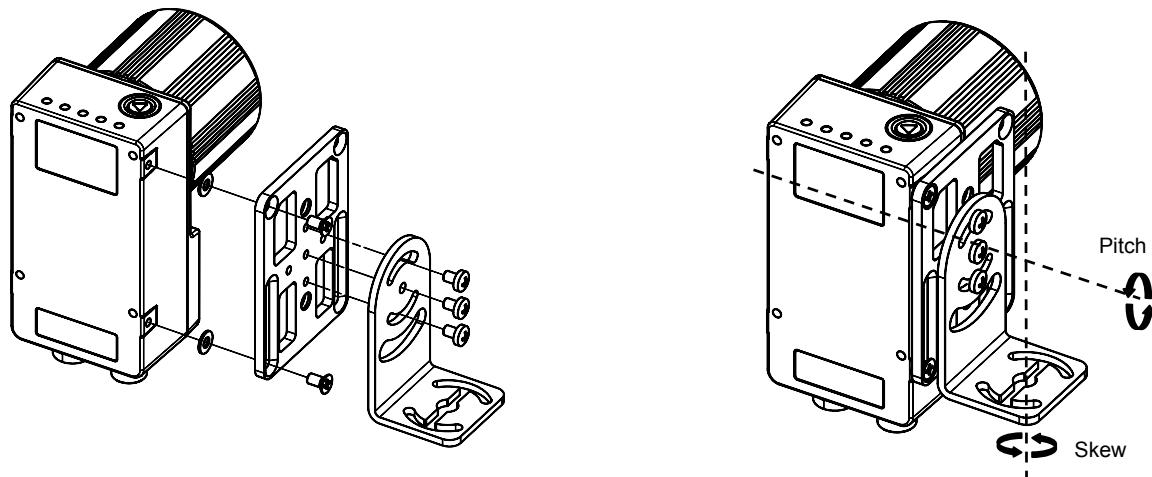


Figure 4 –Positioning with Mounting Bracket (Side)

2. When mounting the Matrix 400™ take into consideration these three ideal label position angles: **Pitch or Skew 10° to 20° and Tilt 0°**, although the reader can read a code at any tilt angle.

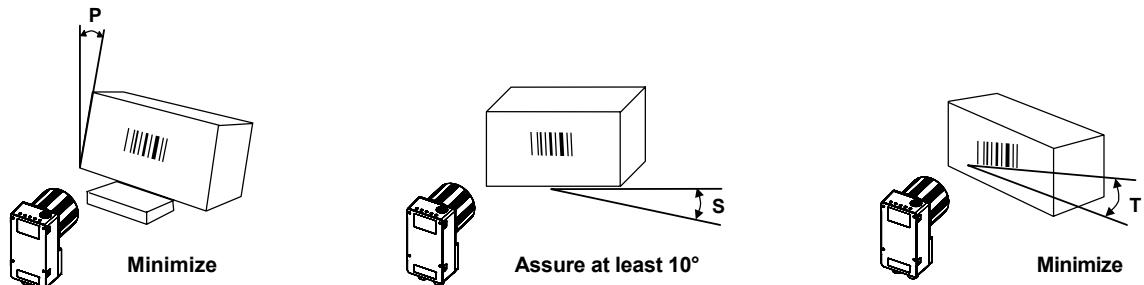


Figure 5 – Pitch, Skew and Tilt Angles

3. Refer to the Optical Accessory Selection table in the Appendix of this Quick Reference Guide for **FOV calculation** and **minimum distance requirements** according to the base/lens combination used for your application.

STEP 4 – FOCUS THE READER

Matrix 400™ provides a built-in tool called Blue Diamonds™ to aid focusing the reader. The Blue Diamonds™ are accessed through the X-PRESS™ Interface.

1. Remove the lens cover in order to focus the reader.
2. Prepare the correct accessory lens for your application:
 - a. Loosen the two set screws on the lens.
 - b. Adjust the Focus ring to the "Far position" and the Diaphragm ring to the **smallest "F"** number setting (diaphragm open).
3. Power the reader on. During the reader startup (reset or restart phase), all the LEDs blink for one second. On the connector side of the reader near the cable, the "POWER ON" LED (blue) indicates the reader is correctly powered.
4. Enter the Focus function by pressing and holding the X-PRESS™ push button until the Focus LED is on.
5. Release the button to enter the Focus function. The Blue Diamonds™ turn on.

The procedure is as follows:

- a. Adjust the Focus ring towards the "Near position" until the Blue Diamonds™ are perfectly in focus, see Figure 7.

At long focal distances a "skew" angle may cause a noticeable difference in focus between the two diamonds, in this case select the best possible focus (both diamonds slightly out of focus). Tighten the Focus set screw.

- b. Adjust the Diaphragm ring to the "F4" number setting which is the preferred setting to complete the installation procedures. Tighten the Diaphragm set screw.

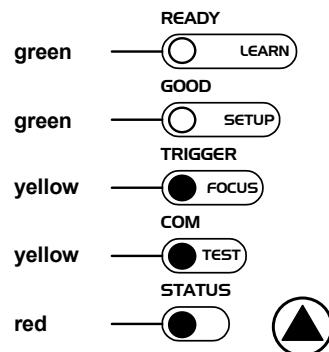


Figure 6 – X-PRESS™ Interface: Focus Function

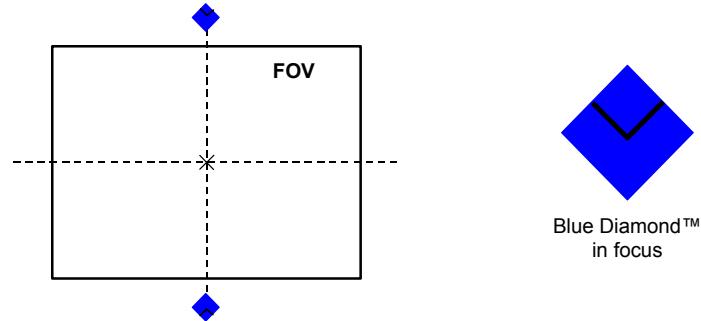


Figure 7 – Focus Function Using Blue Diamonds™



NOTE

The Blue Diamonds™ are referenced to the center of the reader's FOV, therefore they can be used for fine tuning of the reader positioning.

6. Exit the Focus function by pressing the X-PRESS™ push button once. The Blue Diamonds™ turn off.
7. Replace the lens cover, screwing it tightly to the base.

STEP 5 – CALIBRATE IMAGE DENSITY

In order to function correctly to the fullest extent of its capabilities, Matrix 400™ must acquire information regarding image density or PPI (pixels per inch). This calibration takes place through the X-PRESS™ Interface and a special Image Density Calibration chart. **This procedure is necessary only for the first time installation or if the lens type is changed.**

LOCATE

1. Enter the Focus function by pressing and holding the X-PRESS™ push button until the Focus LED is on.
2. Release the button to enter the Focus function. The Blue Diamonds™ turn on.
3. Select a code from the **Image Density Calibration** chart that corresponds approximately to the size of one of the Blue Diamonds™. Position the code at the center of the FOV (equidistant from the Blue Diamonds™).
4. Exit the Focus function by pressing the X-PRESS™ push button once. The Blue Diamonds™ turn off.

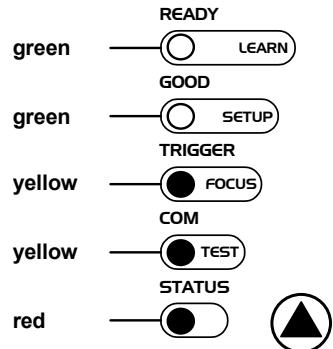


Figure 8 – X-PRESS™ Interface: Locate Function

SETUP

5. Enter the Setup function by pressing and holding the X-PRESS™ push button until the Setup LED is on.
6. Release the button to enter the Setup function. The Setup LED will blink until the procedure is completed.

The Setup procedure ends when the Image Acquisition parameters are successfully saved in the reader memory, the Setup LED will remain on continuously and Matrix 400™ emits 3 high pitched beeps.

If the calibration cannot be reached after a timeout of about 5 (five) seconds Matrix 400™ will exit without saving the parameters to memory, the Setup LED will not remain on continuously but it will just stop blinking. In this case Matrix 400™ emits a long low pitched beep.

7. Exit the Setup function by pressing the X-PRESS™ push button once.

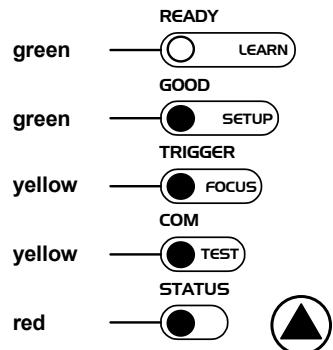


Figure 9 – X-PRESS™ Interface: Setup Function

LEARN

8. Enter the Learn function by pressing and holding the X-PRESS™ push button until the Learn LED is on.
9. Release the button to enter the Learn function. The Learn LED will blink until the procedure is completed.

The Learn procedure ends when the Image Processing and Decoding parameters are successfully saved in the reader memory, the Learn LED will remain on continuously and Matrix 400™ emits 3 high pitched beeps.

If the calibration cannot be reached after a timeout of about 3 (three) minutes Matrix 400™ will exit without saving the parameters to memory, the Learn LED will not remain on continuously but it will just stop blinking. In this case Matrix 400™ emits a long low pitched beep.

10. Exit the Setup function by pressing the X-PRESS™ push button once.

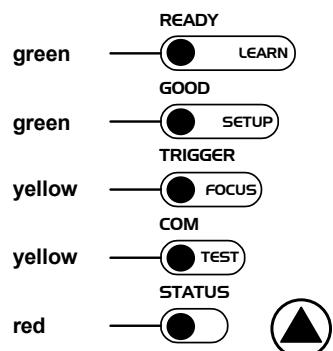


Figure 10 – X-PRESS™ Interface: Learn Function

STEP 6 – X-PRESS™ CONFIGURATION

Once Matrix 400™ has calibrated image density, you can configure it for optimal code reading relative to your application. This configuration can be performed either through the X-PRESS™ Interface or the VisiSet™ configuration program.

LOCATE

1. Enter the Focus function by pressing and holding the X-PRESS™ push button until the Focus LED is on.
2. Release the button to enter the Focus function. The Blue Diamonds™ turn on.
3. Select a code from your application or from the Datalogic 1D/2D Test chart. Position the code at the center of the FOV (equidistant from the Blue Diamonds™).
4. Exit the Focus function by pressing the X-PRESS™ push button once. The Blue Diamonds™ turn off.

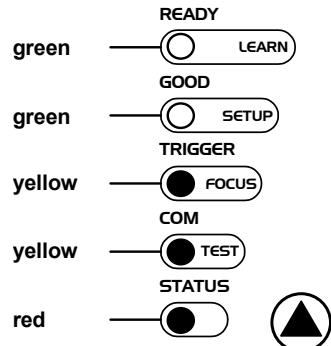


Figure 11 – X-PRESS™ Interface: Locate Function

SETUP

5. Enter the Setup function by pressing and holding the X-PRESS™ push button until the Setup LED is on.
6. Release the button to enter the Setup function. The Setup LED will blink until the procedure is completed.

The Setup procedure ends when the Image Acquisition parameters are successfully saved in the reader memory, the Setup LED will remain on continuously and Matrix 400™ emits 3 high pitched beeps.

If the calibration cannot be reached after a timeout of about 5 (five) seconds Matrix 400™ will exit without saving the parameters to memory, the Setup LED will not remain on continuously but it will just stop blinking. In this case Matrix 400™ emits a long low pitched beep.

7. Exit the Setup function by pressing the X-PRESS™ push button once.

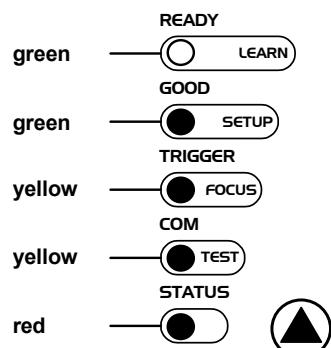


Figure 12 – X-PRESS™ Interface: Setup Function

LEARN

8. Enter the Learn function by pressing and holding the X-PRESS™ push button until the Learn LED is on.
9. Release the button to enter the Learn function. The Learn LED will blink until the procedure is completed.

The Learn procedure ends when the Image Processing and Decoding parameters are successfully saved in the reader memory, the Learn LED will remain on continuously and Matrix 400™ emits 3 high pitched beeps.

If the calibration cannot be reached after a timeout of about 3 (three) minutes Matrix 400™ will exit without saving the parameters to memory, the Learn LED will not remain on continuously but it will just stop blinking. In this case Matrix 400™ emits a long low pitched beep.

10. Exit the Setup function by pressing the X-PRESS™ push button once.

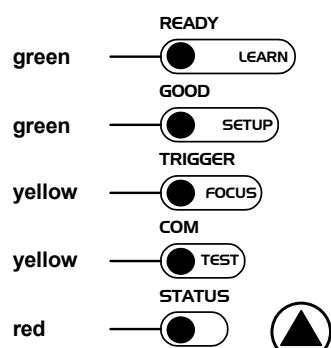


Figure 13 – X-PRESS™ Interface: Learn Function

If you have used this procedure to configure Matrix 400™ go to step 8.

STEP 7 – INSTALLING VISISET™ CONFIGURATION PROGRAM

VisiSet™ is a Datalogic reader configuration tool providing several important advantages:

- Autolearning Wizard for new users;
- Defined configuration directly stored in the reader;
- Communication protocol independent from the physical interface allowing to consider the reader as a remote object to be configured and monitored.

To install VisiSet™, turn on the PC that will be used for the configuration, running Windows 98, 2000/NT or XP, then insert the VisiSet™ CD-ROM, wait for the CD to autorun and follow the installation procedure.

This configuration procedure assumes a laptop computer, running VisiSet™, is connected to the reader's auxiliary port.

WIZARD FOR QUICK READER SETUP

After installing and running the VisiSet™ software program the following window:

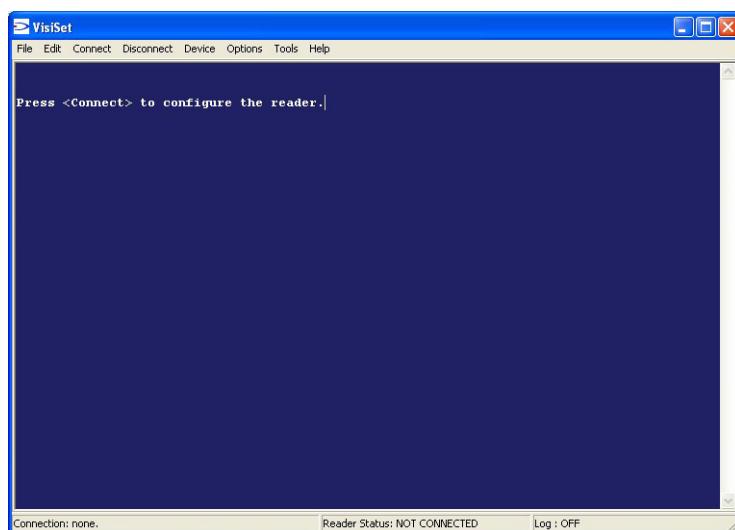


Figure 14 - VisiSet™ Opening Window

Set the communication parameters from the "Options" menu. Then select "Connect", the following window appears:

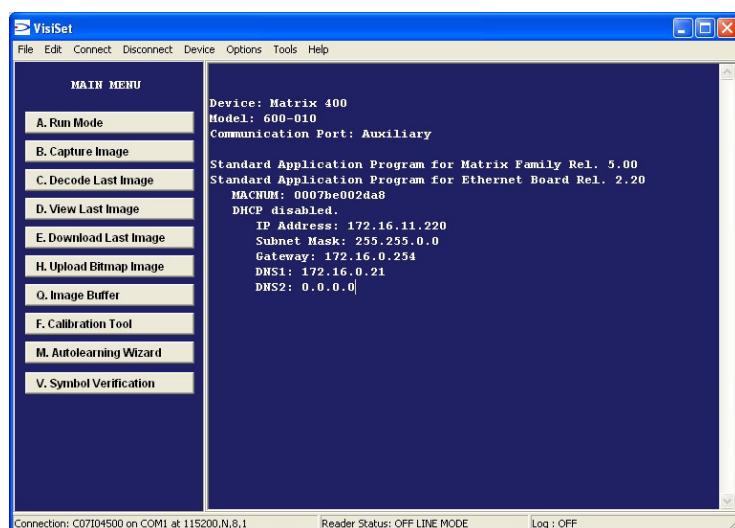
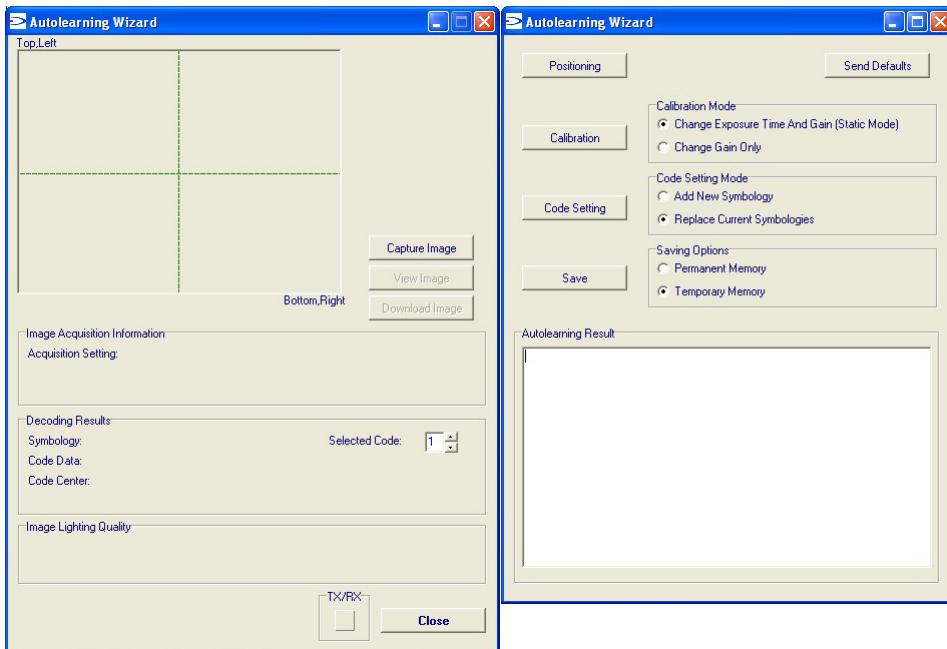


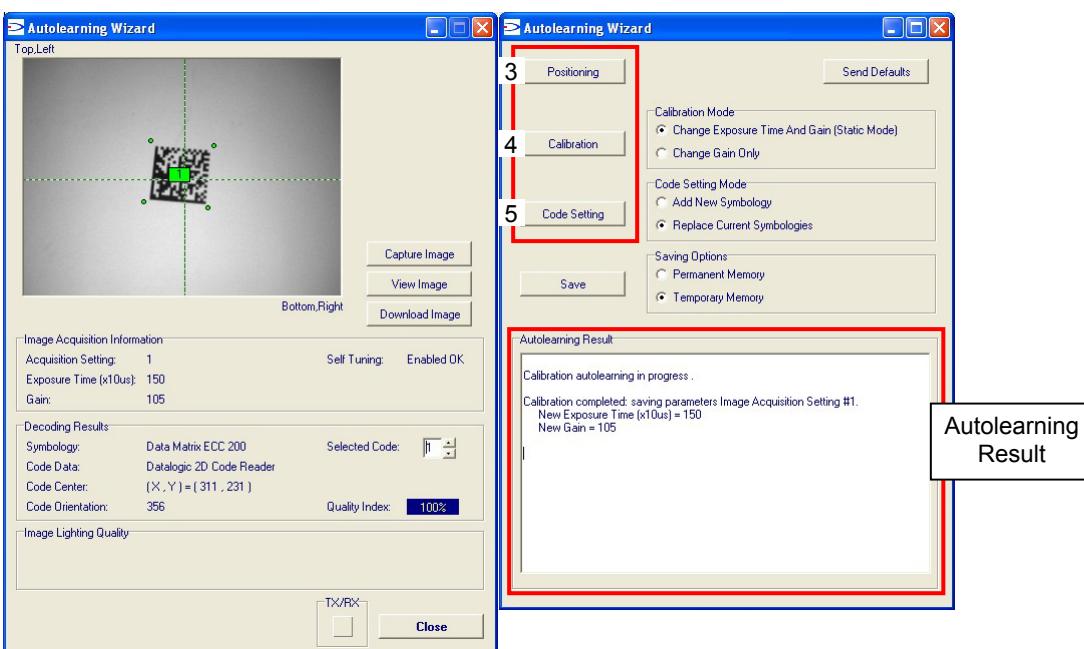
Figure 15 - VisiSet™ Main Window After Connection

The Autolearning Wizard option is advised for rapid configuration or for new users. It allows reader configuration in a few easy steps.

1. Select the Autolearning Wizard button from the Main menu.



2. Place the desired code in front of the reader at the correct reading distance (see step 3 and the Optical Accessory Selection table in the Appendix of this Quick Reference Guide).
3. Press the "Positioning" button. The reader continuously acquires images and gives visual feedback in the view image window to indicate when the code is centered with respect to the reader's FOV. Move the reader (or code) to center it. Press the Positioning button again to stop positioning.
4. Select a Calibration Mode choice and press the "Calibrate" button.

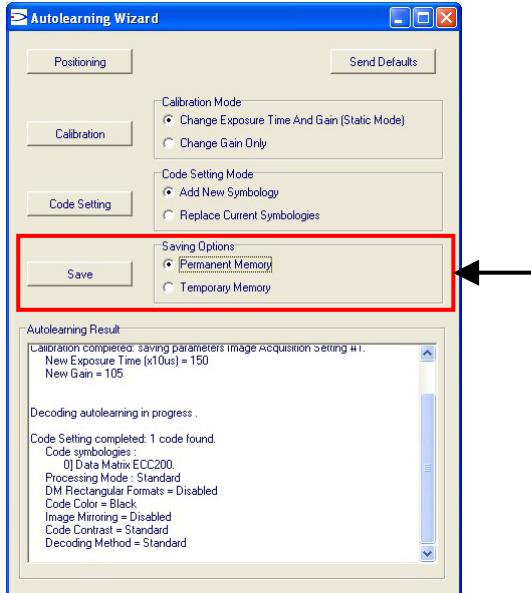


The reader flashes once acquiring the image and auto determines the best exposure and gain settings. If the code symbology is enabled by default, the code will also be decoded.

5. If the code symbology is not enabled by default, select a Code Setting Mode choice and press the "Code Setting" button.

The Autolearning Result section of the Autolearning Wizard window shows the parameter settings and the code type results.

6. Select a Saving Options choice and press the "Save" button.



7. Close the AutoLearning Wizard.



NOTE

If your application has been configured using the VisiSet™ Autolearning Wizard, your reader is ready. If necessary you can use VisiSet™ for advanced reader configuration.

STEP 8 – TEST MODE

Use a code suitable to your application to test the reading performance of the system. Alternatively, you can use the Datalogic 1D/2D Test Chart (Code 39, Data Matrix ECC 200).

1. Enter the *Test* function by pressing and holding the X-PRESS™ push button until the Test LED is on.
2. Release the button to enter the *Test* function.

Once entered, the Bar Graph on the five LEDs is activated and if the reader starts reading codes the Bar-Graph shows the Good Read Rate. In case of no read condition, only the STATUS LED is on and blinks.

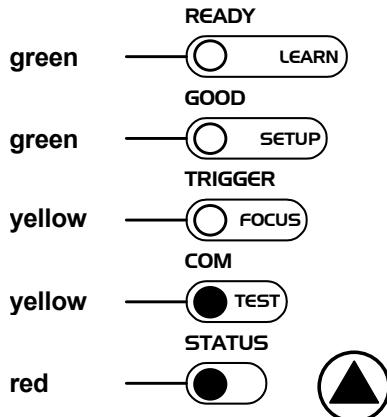


Figure 16 – X-PRESS™ Interface: Test Function

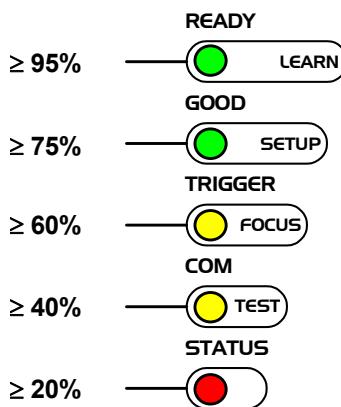
3. To exit the Test, press the X-PRESS™ push button once.



By default, the Test exits automatically after three minutes.

NOTE

The Bar Graph has the following meaning:



ADVANCED READER CONFIGURATION

For further details on advanced product configuration, refer to the complete Reference Manual on the installation CD-ROM or downloadable from the web site through this link: www.automation.datalogic.com/matrix400.

The following are alternative or advanced reader configuration methods:

ADVANCED CONFIGURATION USING VISISET™

Advanced configuration can be performed through the VisiSet™ program by selecting *Device> Get Configuration From Temporary Memory* to open the Parameter Setup window in off-line mode. Advanced configuration is addressed to expert users being able to complete a detailed reader configuration. The desired parameters can be defined in the various folders of the Parameter Setup window and then sent to the reader memory (either Temporary or Permanent):

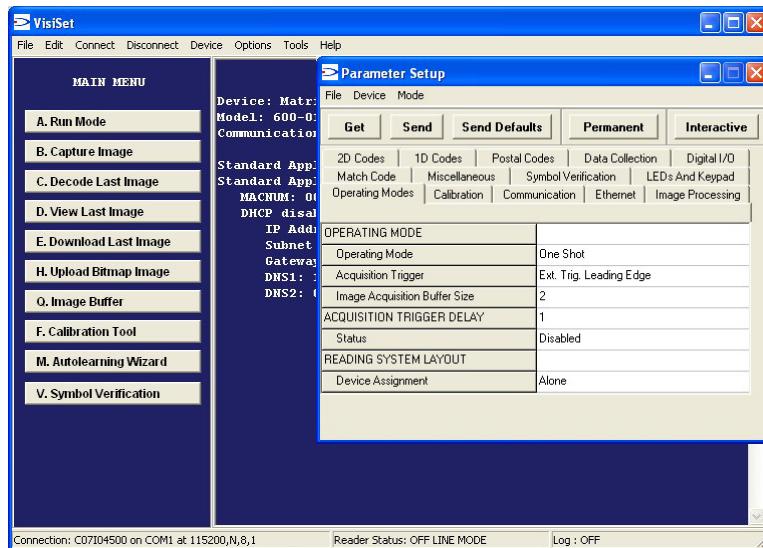


Figure 17 - VisiSet™ Parameter Setup Window

HOST MODE PROGRAMMING

The reader can also be configured from a host computer using the Host Mode programming procedure, by commands via the serial interface. See the Host Mode Programming file on the CD-ROM.

ALTERNATIVE LAYOUTS

If you need to install an Ethernet network, Pass-Through network, Multiplexer network or an RS232 Master/Slave refer to the Matrix 400™ Reference Manual.

APPENDIX

X-PRESS™ is the intuitive Human Machine Interface designed to improve ease of installation and maintenance. Status and diagnostic information are clearly presented by means of the five colored LEDs, whereas the single push button gives immediate access to the following relevant functions:

- *Test* with bar graph visualization to check static reading performance
- *Focus/Locate* to turn on the Blue Diamonds™ to aid focusing and positioning.
- *Setup* to perform Exposure Time and Gain calibration.
- *Learn* to self-detect and auto-configure for reading unknown codes



In normal operating mode the colors and meaning of the five LEDs are illustrated in the following table:

READY (green)	This LED indicates the device is ready to operate.
GOOD (green)	This LED confirms successful reading.
TRIGGER (yellow)	This LED indicates the status of the reading phase.
COM (yellow)	This LED indicates active communication on main serial port.
STATUS (red)	This LED indicates a NO READ result.

During the reader startup (reset or restart phase), all the LEDs blink for one second.

On the connector side of the reader near the cable, the blue POWER ON LED indicates the reader is correctly powered.

For Ethernet models, on the connector side of the reader near the Ethernet connector, the orange NETWORK PRESENCE LED indicates Ethernet network connection.

OPTICAL ACCESSORY SELECTION

Referring to Figure 18 and the formula below, use the data in the following table to calculate the FOV for your application.

Model	Lens	Viewing Angle Horizontal	Viewing Angle Vertical	Viewing Angle Diagonal	Min Focus Distance mm	Lighting System
400-400-0x0 (SXGA)	LNS-1109 9mm	48.5°	39.5°	60°	85	LT-002
	LNS-1112 12.5mm	37°	30°	46.5°	85	LT-002
	LNS-1116 16mm	28.5°	23°	36°	85	LT-001
	LNS-1125 25mm	18.5°	15°	23.5°	135	LT-001
	LNS-1135 35mm	13°	10.5°	16.5°	235	LT-006
	LNS-1150 50mm	9°	7°	11.5°	500	LT-006
400-600-0x0 (UXGA)	LNS-1006 6mm	59.5°	46.5°	71°	85	LT-002
	LNS-1109 9mm	40.5°	31°	49.5°	85	LT-002
	LNS-1112 12.5mm	31°	23.5°	38°	85	LT-002
	LNS-1116 16mm	24°	18°	30°	85	LT-001
	LNS-1125 25mm	15°	11.5°	19°	135	LT-001
	LNS-1135 35mm	11°	8.5°	13.5°	235	LT-006
	LNS-1150 50mm	7.5°	5.5°	9.5°	500	LT-006

The viewing angle has a tolerance of $\pm 1^\circ$ depending on the focus distance.

$$\text{FOV}_x = 2 \left[(d + 35 \text{ mm}) \tan (\alpha_x/2) \right]$$

where:

FOV_x = horizontal, vertical or diagonal FOV

α_x = horizontal, vertical or diagonal viewing angles.

d = focus distance

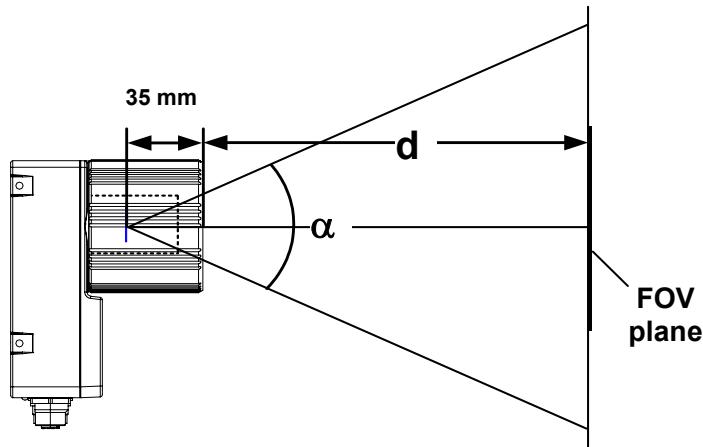


Figure 18 – Reading Distance References

Example:

The FOV for a **Matrix 400-600-0x0** base using the **16 mm lens** at a **focus distance of 200 mm** is:

$$\text{FOV}_H = 2 [(200 \text{ mm} + 35 \text{ mm}) \tan (24^\circ/2)] = 100 \text{ mm}$$

$$\text{FOV}_V = 2 [(200 \text{ mm} + 35 \text{ mm}) \tan (18^\circ/2)] = 74 \text{ mm}$$

TECHNICAL FEATURES

ELECTRICAL FEATURES				
Power Supply Voltage Power Consumption	10 to 30 Vdc 8 W max.; 5 W typical			
Communication Interfaces Main - RS232 - RS485 full-duplex - RS485 half-duplex Auxiliary - RS232 Ethernet (Ethernet Models only)	2400 to 115200 bit/s 2400 to 115200 bit/s 2400 to 115200 bit/s 2400 to 115200 bit/s 10/100 Mbit/s			
Inputs External Trigger and IN2	Opto-coupled and polarity insensitive			
Outputs OUT1 and OUT2	Opto-coupled			
OPTICAL FEATURES		400-4xx-xxx models		
Image Sensor	CMOS	CCD		
Image Format	SXGA (1280x1024)	UXGA (1600x1200)		
Frame Rate	27 frames/sec.	15 frames/sec.		
Pitch	± 35°			
Tilt	0° - 360°			
Lighting System	Internal or External Illuminator (accessories)			
LED Safety Class	Class 1 to EN60825-1			
USER INTERFACE				
LED Indicators	Power, Ready, Good; Trigger; Com, Status, (Network); (Green Spot)			
Keypad Button	Configurable via VisiSet™			
SOFTWARE FEATURES				
Readable Code Symbologies				
1-D and stacked	2-D	POSTAL		
<ul style="list-style-type: none"> PDF417 Standard and Micro PDF417 Code 128 (EAN 128) Code 39 (Standard and Full ASCII) Interleaved 2 of 5 Codabar Code 93 Pharmacode EAN-8/13 - UPC-A/E (including Addon 2 and Addon 5) GS1 DataBar (RSS) Family Composite Symbologies 	<ul style="list-style-type: none"> Data Matrix ECC 200 (Standard and Direct Marking) QR Code (Standard and Direct Marking) MAXICODE Aztec Code Microglyph (this symbology requires an activation procedure – contact your local Datalogic Automation distributor for details) 	<ul style="list-style-type: none"> Australia Post Royal Mail 4 State Customer Kix Code Japan Post PLANET POSTNET, POSTNET (+BB) POSTNET + PLANET, POSTNET (+BB) + PLANET 		
Operating Mode	ONE SHOT, CONTINUOUS, PHASE MODE			
Configuration Methods	By means of X-PRESS™ Human Machine Interface or VisiSet™ configuration software			
Parameter Storage	Permanent memory (Flash)			
CODE QUALITY VERIFICATION				
Standard	Supported Symbologies			
ISO/IEC 16022	Data Matrix ECC 200			
ISO/IEC 18004	QR Code			
ISO/IEC 15415	Data Matrix ECC 200, QR Code			
ISO/IEC 15416	Code 128, Code 39, Interleaved 2 of 5, Codabar, Code 93, EAN-8/13, UPC-A/E			
AS9132A	Data Matrix ECC 200			
MECHANICAL FEATURES				
Dimensions	123 x 60.5 x 87 mm (4.85 x 2.38 x 3.43 in.) with lens cover			
Weight	482 g. (17 oz.) with lens and internal illuminator			
Material	Aluminium			
ENVIRONMENTAL FEATURES				
Operating Temperature	0 to 50 °C (32 to 122 °F)			
Storage Temperature	-20 to 70 °C (-4 to 158 °F)			
Max. Humidity	90% non condensing			
Protection Class	IP67			

MECHANICAL DIMENSIONS

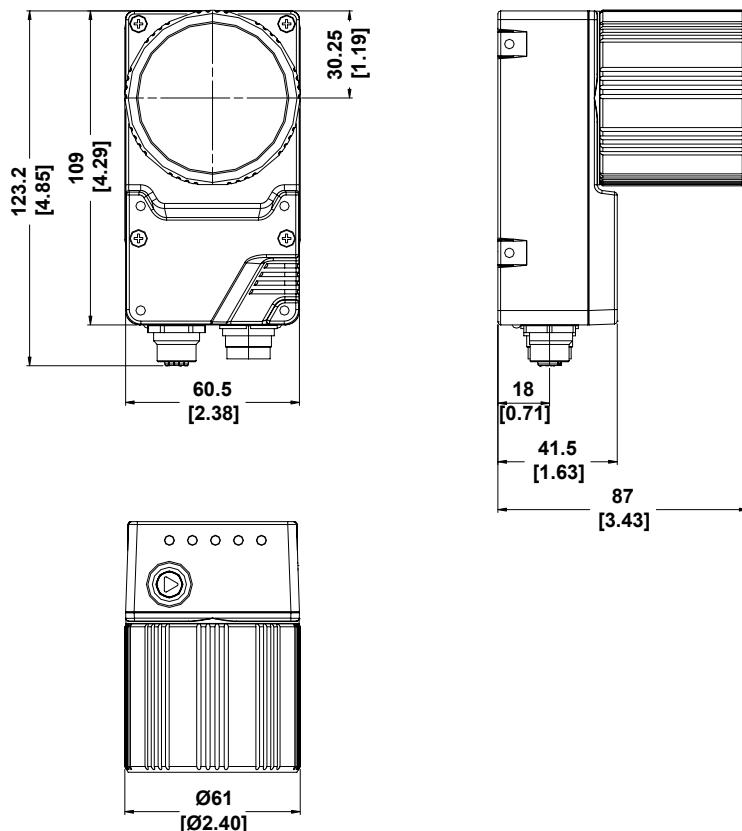


Figure 19 – Matrix 400™ Overall Dimensions

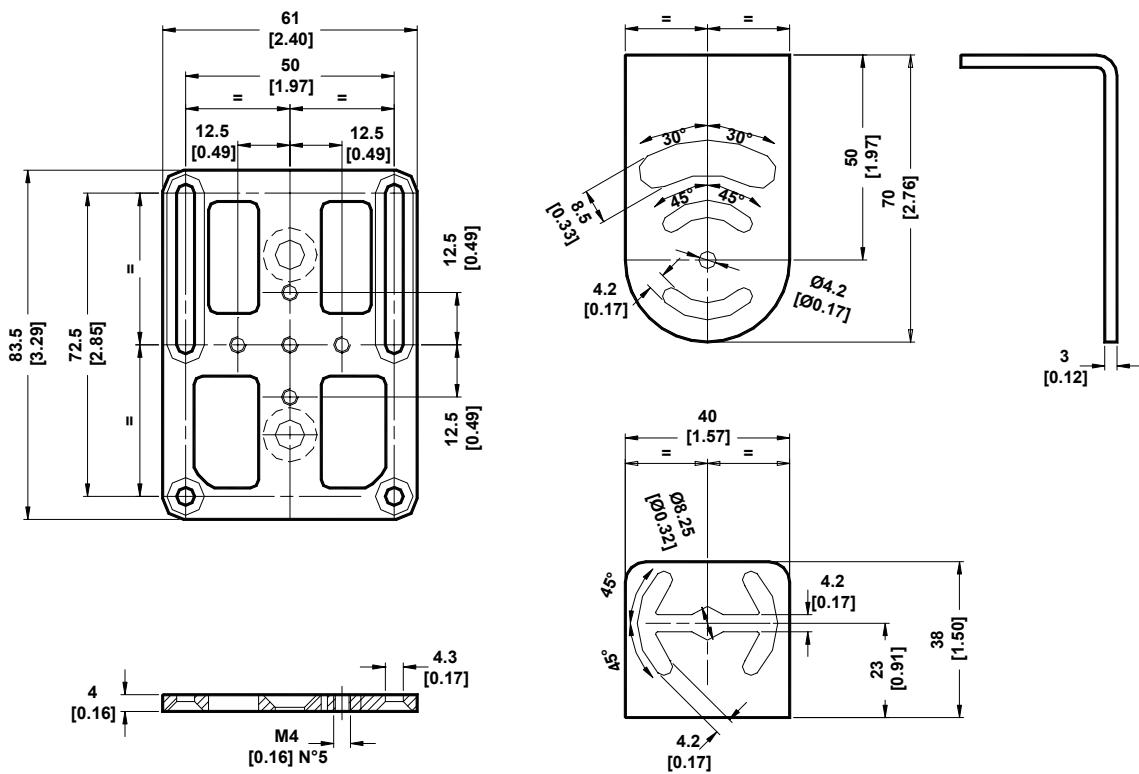


Figure 20 – Mounting Brackets Overall Dimensions

PATENTS

This product is covered by one or more of the following patents:

U.S. patents: 6,512,218 B1; 6,616,039 B1; 6,808,114 B1; 6,997,385 B2
European patents: 999,514 B1; 1,014,292 B1; 1,128,315 B1.

Additional patents pending.

COMPLIANCE

EMC COMPLIANCE

In order to meet the EMC requirements:

- connect reader chassis to the plant earth ground by means of a flat copper braid shorter than 100 mm;
- connect pin 7,8 of the C-Box 100 to a good Earth Ground;

POWER SUPPLY

This product is intended to be installed by Qualified Personnel only.

This product is intended to be connected to a UL Listed Computer which supplies power directly to the reader or a UL Listed Direct Plug-in Power Unit marked LPS or "Class 2", rated 10 to 30 V, minimum 1 A.

CE COMPLIANCE

Warning: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WEEE COMPLIANCE



ENGLISH

Information for the user in accordance with the European Commission Directive 2002/96/EC

At the end of its useful life, the product marked with the crossed out wheeled wastebin must be disposed of separately from urban waste.

Disposing of the product according to this Directive:

- avoids potentially negative consequences to the environment and human health which otherwise could be caused by incorrect disposal
- enables the recovery of materials to obtain a significant savings of energy and resources.

For more detailed information about disposal, contact the supplier that provided you with the product in question or consult the dedicated section at the website www.automation.datalogic.com.

ITALIANO

Informazione degli utenti ai sensi della Direttiva Europea 2002/96/EC

L'apparecchiatura che riporta il simbolo del bidone barrato deve essere smaltita, alla fine della sua vita utile, separatamente dai rifiuti urbani.

Smaltire l'apparecchiatura in conformità alla presente Direttiva consente di:

- evitare possibili conseguenze negative per l'ambiente e per la salute umana che potrebbero invece essere causati dall'errato smaltimento dello stesso;
- recuperare materiali di cui è composto al fine di ottenere un importante risparmio di energia e di risorse.

Per maggiori dettagli sulle modalità di smaltimento, contattare il Fornitore dal quale è stata acquistata l'apparecchiatura o consultare la sezione dedicata sul sito www.automation.datalogic.com.

DEUTSCH

Benutzerinformation bezüglich Richtlinie 2002/96/EC der europäischen Kommission

Am Ende des Gerätelebenszyklus darf das Produkt nicht über den städtischen Hausmüll entsorgt werden. Eine entsprechende Mülltrennung ist erforderlich.

Beseitigung des Produkts entsprechend der Richtlinie:

- verhindert negative Auswirkungen für die Umwelt und die Gesundheit der Menschen
- ermöglicht die Wiederverwendung der Materialien und spart somit Energie und Ressourcen

Weitere Informationen zu dieser Richtlinie erhalten sie von ihrem Lieferanten über den sie das Produkt erworben haben, oder besuchen sie unsere Homepage unter www.automation.datalogic.com.

FRANÇAIS

Information aux utilisateurs concernant la Directive Européenne 2002/96/EC

Au terme de sa vie utile, le produit qui porte le symbole d'un caisson à ordures barré ne doit pas être éliminé avec les déchets urbains.

Éliminer ce produit selon cette Directive permet de:

- éviter les retombées négatives pour l'environnement et la santé dérivant d'une élimination incorrecte
- récupérer les matériaux dans le but d'une économie importante en termes d'énergie et de ressources

Pour obtenir des informations complémentaires concernant l'élimination, veuillez contacter le fournisseur auprès duquel vous avez acheté le produit ou consulter la section consacrée au site Web www.automation.datalogic.com.

ESPAÑOL

Información para el usuario de acuerdo con la Directiva Europea 2002/96/CE

Al final de su vida útil, el producto marcado con un simbolo de contenedor de basura móvil tachado no debe eliminarse junto a los desechos urbanos.

Eliminar este producto de acuerdo con la Directiva permite de:

- evitar posibles consecuencias negativas para el medio ambiente y la salud derivadas de una eliminación inadecuada
- recuperar los materiales obteniendo así un ahorro importante de energía y recursos

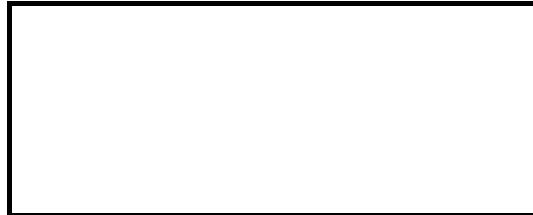
Para obtener una información más detallada sobre la eliminación, por favor, póngase en contacto con el proveedor donde lo compró o consultar la sección dedicada en el Web site www.automation.datalogic.com.

SERIAL NUMBER REFERENCES

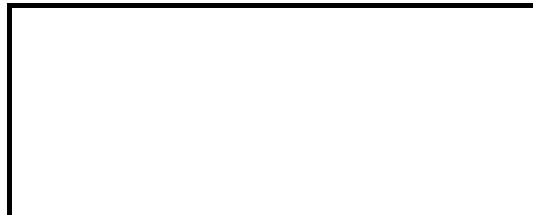
Place the replicate Matrix 400™ base, lens and illuminator serial number labels here for reference.

Serial Numbers

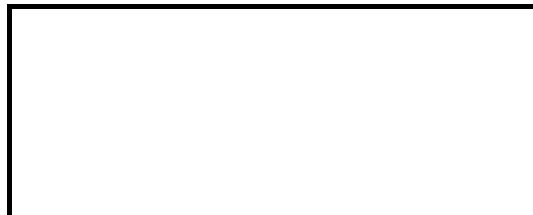
Matrix 400™



Lens



Illuminator



821001350